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EXAMINER

RUTTEN, JAMES D

ART UNIT PAPER NUMBER

2122

DATE MAILED: 02/05/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Applicati n No.

09/552,861

Applicant(s)

SNOW, PAUL ALAN

Examiner

J. Derek Rutten

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,5,6,9,11-13 and 25-35 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1,2,5,6,9,11-13 and 25-35 is/are rejected.
- 7) ☒ Claim(s) 11 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 December 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). ____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____ 6) ☐ Other: ____

DETAILED ACTION

Remarks

1. Applicant's amendment dated December 24, 2003, responding to the September 17, 2003 Office Action provided in the rejection of claims 1-24, wherein claims 1, 2, 5, 6, 9, and 11-13 have been amended. Claims 3, 4, 7, 8, 10, and 14-24 have been cancelled. Claims 25-35 have been added. Claims 1, 2, 5, 6, 9, 11-13, and 25-35 remain pending in the application and have been fully considered by the examiner.

Applicant primarily arguing that the claims are not anticipated by the Crow, House, Gadol, and Lentz patents. Applicant is also arguing that the claims are not unpatentable over the House and Jalili patents. Applicant's arguments with respect to claim rejections have been considered but are moot in view of the new grounds of rejection.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Drawings

2. The proposed drawing correction filed on December 24, 2003 has been disapproved because it is not in the form of a pen-and-ink sketch showing changes in red ink or with the changes otherwise highlighted. See MPEP § 608.02(v).
3. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: 910. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Double Patenting

4. The double patenting rejection of claims 12, 16, 20, and 24 from the previous Office Action, paper number 5 is withdrawn in view of the amendments filed December 24, 2003.

Claim Objections

5. Claim 11 is objected to because of the following informalities: A typo in line 3 includes the word “for” in the phrase “interface for receiving”. The phrase should read --interface receiving--. Appropriate correction is required.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

7. Claims 1, 2, 5, 9, 25, 26, 30, and 31 are rejected under 35 U.S.C. 102(e) as being anticipated by prior art of record U.S. Patent 6,145,119 to House et al. (hereinafter referred to as House).

The applied reference has a common assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention “by another,” or by an appropriate showing under 37 CFR 1.131.

a. Regarding claim 1, House discloses:

a storage unit for storing a plurality of working definitions for a plurality of computing environments (see column 3 line 60: “The first tier comprises a client computer having a monitor and one or more data **storage** devices”, and Figures 1 and 5A; also column 6 lines 8-10: “The **APP file** 454 encapsulates all of the objects that make up a project. From a single APP file 454, the project and all of its state can be recovered...”); *and*

an interface for receiving requests for one of the plurality of computing environments from and transferring the requested one of the plurality of computing

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environments to a client over a communications line (see column 4, lines 23-27: “The RDBMS receives **requests** either directly from tier-2 and/or indirectly from tier-2 via the VAB-II runtime module, and then performs the desired database functions”, and Figure

1. Comments: A database inherently transfers the results of a received request, otherwise no information could be retrieved.);

*each one of said plurality of **computing environments** including a set of first working definitions that define a plurality of applications* (column 6 lines 22-27: “The Runtime Section 550 contains all of the data needed primarily at “runtime,” including executable programming logic. **Data stored in the Runtime Section 550** is used to quickly and efficiently load **information that is used to run an application**”) and

a second working definition that defines said each one of said plurality of computing environments (column 6 line 27-31: “The second major section is **The Other Data Section 552**, which contains all other project related data, including **project environment data** (such as source code, design time properties, other project development data, etc.)”),

said set of first working definitions and said second working definition being included in said plurality of working definitions (column 6 lines 21-22: “The APP file 454 comprises two major sections, a Runtime Section 550 and an Other Data section 552.”);

*each one of said set of **first working definitions** including platform independent definitions that define characteristics of one of said plurality of applications that are necessary to construct a valid runtime image of said one of said*

plurality of applications (column 8 lines 11-15: “For example, **any type of computer**, such as a mainframe, minicomputer, or personal computer, or computer configuration, such as a timesharing mainframe, local area network, or standalone personal computer, could be used with the present invention.”; also column 6 lines 22-27: “**The Runtime Section 550 contains all of the data needed** primarily at “runtime,” including executable programming logic. Data stored in the Runtime Section 550 is used to quickly and efficiently load information that is used to run an application.”),

said characteristics including state, settings, and structures required to build said runtime image of said one of said plurality of applications (Figure 5A; column 6 lines 8-13: “The APP file 454 encapsulates all of the objects that make up a project. From a single APP file 454, the project and **all of its state** can be recovered (state also includes such design time behavior as which form is currently active and where in a module the code editor was last positioned before the project was saved).”; column 6 lines 52-55: “The present invention solves this problem by instead representing information describing **relationships** between objects inside the APP file 454 using Object IDs 560 and Object Relationships 562.”; column 7 lines 8-10: “For example, an Object Type of Form will have in its Object Data Section 558 **properties** of the Form object (such as size, color, etc.).”); and

said second working definition including platform independent definitions that define characteristics of said each one of said plurality of computing environments that are necessary to construct a valid runtime image of said each one of said plurality of computing environments (column 8 lines 11-

15 as cited above; column 6 lines 27-30: “The second major section is The Other Data Section 552, which contains **all other project related data**, including project environment data (such as source code, design time properties, other project development data, etc.).”),

said characteristics including state, settings, and structures required to build said runtime image of said each one of said plurality of computing environments (as cited above: Figure 5A; column 6 lines 8-13; column 6 lines 52-55; column 7 lines 8-10).

b. Regarding claim 2, House discloses: *wherein the communication line is the Internet* (column 2 lines 52-55: “...the present invention discloses a method, apparatus, and article of manufacture for providing a programming development environment that supports the development of **Internet** and Intranet applications”).

c. Regarding claim 5, House discloses: *wherein each one of said set of first working definitions includes source code for one of said plurality of applications defined by said one of said set of first working definitions* (column 2 lines 57-60: “The data structure allows all elements and associations necessary to build the components of the project, such as the **source**, objects, executables to be contained or described in a single file”).

d. Regarding claim 9, House discloses: *wherein the communications line is an intranet* (column 2 lines 52-55: “...the present invention discloses a method, apparatus, and article of manufacture for providing a programming development environment that supports the development of Internet and **Intranet** applications”).

e. Regarding claims 25 and 26, House discloses *a computer program product* (column 5 lines 38-43). All other limitations have been addressed in the above rejections of claims 1 and 5, respectively.

f. Regarding claims 30 and 31, House discloses *a method for providing automated software development to a client* (column 9 lines 5-35). All other limitations have been addressed in the above rejections of claims 1 and 5, respectively.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 6, 27, and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over House as applied to claim 1 above, and further in view of prior art of record U.S. Patent 5,423,042 to Jalili et al. (hereinafter referred to as “Jalili”).

a. Regarding claim 6, House further discloses support for development, testing, beta testing, and deployment of the plurality of applications (column 2 lines 4-8).

House does not explicitly disclose *wherein encrypted links are sent to the client along with the requested one of the plurality of computing environments*.

However, in an analogous environment, Jalili discloses a system of communication using encrypted links (see column 14, lines 8-13: "Part number 2 can be implemented by associating with each client an encrypted identifier, which the client uses for all transactions with the server. The server then, based on the client's identification and the permissions associated with a function, authorizes or denies the clients requests.").

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use House's application development system with Jalili's encryption to protect access to certain objects. The motivation for doing this is that protections or permissions allow or disallow certain clients from making certain requests.

b. Regarding claim 27, House discloses *a computer program product* (column 5 lines 38-43). All other limitations have been addressed in the above rejection of claim 6.

c. Regarding claim 32, House discloses *a method for providing automated software development to a client* (column 9 lines 5-35). All other limitations have been addressed in the above rejection of claim 6.

10. Claims 1, 2, 11-13, 25, 28-30, and 33-35 are rejected under 35 U.S.C. 103(a) as being unpatentable over prior art of record U.S. Patent 5,361,360 to Ishigami et al. (hereinafter referred to as "Ishigami") in view of prior art of record U.S. Patent 6,083,276 to Davidson et al., (hereinafter referred to as "Davidson").

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a. Regarding claim 1, Ishigami discloses:

An application development server (Figure 1; column 3 lines 38-40: “Referring to FIG. 1, a distributed programming system 100 is structured by a center 1 and a plurality of distributed stations 2-i (i=1 to n).”), *comprising:*

a storage unit for storing a plurality of working definitions for a plurality of computing environments (column 2 lines 13-17: “In response to a request for setting a development **environment, definition information**, including a plurality of sets of tool and data names **stored**, is displayed so that a user can select some of the displayed sets of information.”);

an interface for receiving requests for one of the plurality of computing environments from and transferring the requested one of the plurality of computing environments to a client over a communications line (column 2 lines 17-19: “A transmission **request for transmitting** the tools and data shown in the selected set is generated” Comments: An interface is inherent to receiving and transmitting, otherwise communication is impossible.);

each one of said plurality of computing environments including a set of first working definitions that define a plurality of applications (column 2 lines 13-17: “In response to a request for setting a development environment, definition information, including **a plurality of sets of tool and data names** stored, is displayed so that a user can select some of the displayed sets of information.”) *and a second working definition that defines said each one of said plurality of computing environments* (column 2 lines 35-38: “Information relating to a hardware configuration

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and software configuration information relating to tools and data already installed is also stored.”),

said set of first working definitions and said second working definition being included in said plurality of working definitions (column 2 lines 38-44: “When the definition information or the information of hardware configuration changed, software information and names of a plurality of sets of tools and data are referred to. Then, matching of tools and data already installed with the definition information and hardware configuration after they have been changed is inspected.” Comments: This passage shows that both application and environment information is stored and regarded as part of the set of definitions.);

each one of said set of first working definitions including definitions that define characteristics of one of said plurality of applications said characteristics including settings required to build said one of said plurality of applications (column 2 lines 9-12: “A plurality of sets of names of tools and names of data which are necessary for developing a software are included in this definition information.”); *and*

said second working definition including definitions that define characteristics of said each one of said plurality of computing environments, said characteristics including settings required to build said each one of said plurality of computing environments (column 2 lines 35-47: “**Information** relating to a hardware **configuration** and software **configuration** information relating to tools and data already installed is also stored. When the definition information or the information of hardware configuration changed, software information and names of a plurality of sets of tools and data are referred to.

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Then, matching of tools and data already installed with the definition information and hardware configuration after they have been changed is inspected. Those tools and data which have already been installed to match the definition information or hardware configuration after the change are automatically updated.” Comments: Environment configuration information is required to build new tools.).

Ishigami does not expressly disclose:

platform independent definitions that are necessary to construct a valid runtime image, said characteristics including state, and structures required to build said runtime image.

However, in an analogous environment, Davidson teaches

working definitions including platform independent definitions that define characteristics that are necessary to construct a valid runtime image (column 6 lines 45-48: “Preferably, the ADF 202 is an **XML-compliant** text document that **defines** a component-based **application** using a descriptive attribute grammar”; also column 7 lines 36-38: “Additionally, the elements 306 may contain **attributes** 310, which correspond to properties of a component 212.” Comments: XML is a platform independent markup language.), *and*

said characteristics including state, and structures required to build said runtime image (Figures 3A and 3B: “Data” element 308 carries state, and XML documents carry inherent structure.)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use Ishigami’s development server with Davidson’s platform independent definitions. One of ordinary skill in the art would have been motivated to

create and fully configure applications using a text-based XML-compliant grammar, and to specify the user-oriented interactive behavior of an application in purely descriptive form without resorting to procedural or functional language.

b. Regarding claim 2, Ishigami does not expressly disclose use of the Internet.

However, in an analogous environment, Davidson teaches use of the World Wide Web, which is implemented using the Internet (column 1 lines 50-51).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the Davidson's World Wide Web with Ishigami's server. One of ordinary skill in the art would be motivated to provide broad access to a server.

c. Regarding claim 11, Ishigami further discloses

Said interface receiving an update to one of said set of first working definitions; and modifying said one of said set of first working definitions being modified to reflect said update (column 8 lines 18-23).

d. Regarding claim 12, Ishigami further discloses

a change occurring within a data processing system (column 2 lines 37-41); *responsive to a determination that the change affects one of said set of first working definitions, the one of said set of first working definitions being modified to reflect the change* (Figure 7, step 508; column 8, lines 18-23); and

the runtime image of one of said plurality of applications defined by said one of said set of first working definitions being updated (column 2 lines 44-47).

e. Regarding claim 13, Ishigami further discloses *wherein the change is an event* (column 7 lines 41-47).

f. Regarding claims 25, 28, and 29, Ishigami discloses a computer program product (Figure 2, reference 60; column 4 lines 44-52). All other limitations have been addressed in the above rejections of claims 1, 11, and 12, respectively.

g. Regarding claims 30, and 33-35, Ishigami discloses a method for providing automated software development to a client (column 10 line 13 – column 12 line 16). All other limitations have been addressed in the above rejections of claims 1, and 11-13, respectively.

11. Claims 5, 9, 26, and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Ishigami and Davidson as applied to claim 1 above, and further in view of U.S. Patent 5,953,525 to Glaser et al. (hereinafter referred to as “Glaser”).

a. Regarding claim 5, the combination of Ishigami and Davidson does not explicitly disclose including application source code in the working definition.

However, in an analogous environment, Glaser teaches the inclusion of source code in a working definition (column 6 lines 51-56).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use Glaser's source code inclusion with the combination of Ishigami and Davidson's working definitions. One of ordinary skill would have been motivated to provide a development environment with all of the data and structures that represent a software project.

- b. Regarding claim 9, the combination of Ishigami and Davidson does not explicitly disclose *wherein the communications line is an intranet*.

However, in an analogous environment, Glaser teaches the use of an intranet (column 2 lines 38-42).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use Glaser's intranet with the combination of Ishigami and Davidson's server. One of ordinary skill would have been motivated to provide information management within a company or organization while protecting resources from a larger network such as the Internet.

- c. Regarding claim 26, Ishigami discloses a computer program product (Figure 2, reference 60; column 4 lines 44-52). All other limitations have been addressed in the above rejection of claim 5.

- d. Regarding claim 31, Ishigami discloses a method for providing automated software development to a client (column 10 line 13 – column 12 line 16). All other limitations have been addressed in the above rejection of claim 5.

12. Claims 6, 27 and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Ishigami and Davidson as applied to claim 1 above, and further in view of Jalili.

a. Regarding claim 6, Ishigami further discloses support for development, testing, beta testing, and deployment of the plurality of applications (column 1 lines 7-9).

The combination of Ishigami and Davidson do not explicitly disclose sending encrypted links along with computing environments.

However, in an analogous environment, Jalili discloses a system of communication using encrypted links (see column 14, lines 8-13).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the combination of Ishigami and Davidson's computing environment's with Jalili's encryption to protect access to certain objects. The motivation for doing this is that protections or permissions allow or disallow certain clients from making certain requests.

b. Regarding claim 27, Ishigami discloses a computer program product (Figure 2, reference 60; column 4 lines 44-52). All other limitations have been addressed in the above rejection of claim 6.

c. Regarding claim 32, Ishigami discloses a method for providing automated software development to a client (column 10 line 13 – column 12 line 16). All other limitations have been addressed in the above rejection of claim 5.

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Conclusion

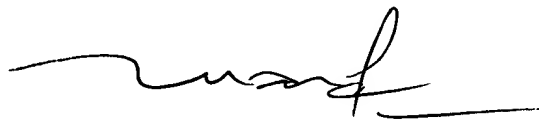
13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to J. Derek Ruten whose telephone number is (703) 605-5233.

The examiner can normally be reached on M-F 6:30-3:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tuan Q. Dam can be reached on (703) 305-4552. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

jdr



TUAN DAM
SUPERVISORY PATENT EXAMINER